



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,842	09/09/2003	Clyde C. Lunsford	45634/319313 (1274)	3011

23370 7590 06/08/2007
JOHN S. PRATT, ESQ
KILPATRICK STOCKTON, LLP
1100 PEACHTREE STREET
ATLANTA, GA 30309

EXAMINER

CHOI, PETER Y

ART UNIT	PAPER NUMBER
----------	--------------

1771

MAIL DATE	DELIVERY MODE
-----------	---------------

06/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/658,842	Applicant(s) LUNSFORD ET AL.	
	Examiner Peter Y. Choi	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8, 10-18, 20-27, 29-35, 37-42, 45-53 and 65-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-8, 10-18, 20-27, 29-35, 37-42, 45-53 and 65-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-4, 6-8, 10-14, 16-18, 29-35, 37-42, 45-49, 51-53, 65, 66, and 68-70 are rejected under 35 U.S.C. 102(b) as being anticipated by, or alternatively under 35 U.S.C. 103(a) as obvious over, USPN 5,275,627 to Cates.

Regarding claims 2-4, 6-8, and 65, Cates teaches a dyed flame resistant fabric comprising a blend of a plurality of fibers, wherein the plurality of fibers consists of inherently flame resistant fibers comprising at least one of aromatic polyamide, polyamide imide, or polyimide, and cellulosic fibers comprising at least one of rayon, acetate, triacetate, or lyocell, wherein at least some of the cellulosic fibers comprise a flame retardant compound, and a residual amount of a dye-assistant comprising at least one of N-cyclohexylpyrrolidone, benzyl alcohol, N,N-dibutylformamide, N,N-diethylbenzamide, hexadecyltrimethyl ammonium salt, N,N-dimethylbenzamide, N,N-diethyl-m-toluamide, N-octylpyrrolidone, aryl ether, N,N-dimethylcaprylamide, or N,N-dimethylcapramide (see entire document including column 1 lines

Art Unit: 1771

9-59, column 2 lines 3-22, column 2 lines 52-61, column 3 line 10 to column 4 line 9, column 4 lines 51-65, column 5 line 60 to column 6 line 10, Table I, Table II).

Regarding claim 2, at least some of the inherently flame resistant fibers comprise meta-aramid fibers (column 3 lines 21-62).

Regarding claim 3, at least some of the cellulosic fibers comprise rayon fibers (column 3 lines 21-62).

Regarding claim 4, the residual amount of dye assistant comprises at least one of N-cyclohexylpyrrolidone, benzyl alcohol, or N,N-dibutylformamide (column 1 lines 46-59, column 2 lines 3-22, column 6 lines 4-10).

Regarding claims 6 and 7, Cates does not appear to teach that the fabric exhibits a duration of afterflame no greater than 2.0 seconds when subjected to a vertical flammability test conducted in accordance with FTMS 191A Method 5903.1 using a three second exposure and that the fabric exhibits a shrinkage percentage of no greater than approximately 7% after 20 launderings conducted in accordance with AATCC Test Method 135-1992 Table I(3)(V)(A)(iii). Although the prior art does not disclose the claimed duration of afterflame and shrinkage percentage, the claimed properties are deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention. Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Regarding claim 8, Cates does not appear to teach that at least some of the inherently flame resistant fibers of the fabric have been dyed a shade of color which would result in an L value between approximately 18 and the griage L value of the fabric if the inherently flame

Art Unit: 1771

resistant fibers were used to form a fabric composed exclusively of the inherently flame resistant fibers. Although the prior art does not disclose shade of color, the claimed shade of color is deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention.

Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise. Additionally, in the event that it is shown that the shade of color is not inherent to the fabric of Cates, it would have been obvious to one of ordinary skill in the art to dye the fabric a shade of color substantially similar to the claimed shade of color motivated by the desire to form a dyed fabric suitable for the intended application.

Regarding claims 10-14, 16-18, and 66, Cates teaches a dyed flame resistant fabric comprising a blend of a plurality of fibers, wherein the plurality of fibers consists of inherently flame resistant fibers, and cellulosic fibers wherein at least some of the cellulosic fibers comprise a flame retardant compound, and a residual amount of a dye-assistant comprising at least one of N-cyclohexylpyrrolidone, benzyl alcohol, N,N-dibutylformamide, N,N-diethylbenzamide, hexadecyltrimethyl ammonium salt, N,N-dimethylbenzamide, N,N-diethyl-m-toluamide, N-octylpyrrolidone, aryl ether, N,N-dimethylcaprylamide, or N,N-dimethylcapramide (see entire document including column 1 lines 9-59, column 2 lines 3-22, column 2 lines 52-61, column 3 line 10 to column 4 line 9, column 4 lines 51-65, column 5 line 60 to column 6 line 10, Table I, Table II).

Regarding claim 10, the residual amount of dye assistant comprises at least one of N-cyclohexylpyrrolidone, benzyl alcohol, or N,N-dibutylformamide (column 1 lines 46-59, column 2 lines 3-22, column 6 lines 4-10).

Regarding claim 11, the inherently flame resistant fibers comprise at least one of aromatic polyamide, polyamide imide, or polyimide (column 3 lines 21-62).

Regarding claim 12, at least some of the inherently flame resistant fibers comprise meta-aramid fibers (column 3 lines 21-62).

Regarding claim 13, at least some of the cellulosic fibers comprise at least one of rayon, acetate, triacetate, or lyocell (column 3 lines 21-62).

Regarding claim 14, at least some of the cellulosic fibers comprise rayon fibers (column 3 lines 21-62).

Regarding claims 16 and 17, Cates does not appear to teach that the fabric exhibits a duration of afterflame no greater than 2.0 seconds when subjected to a vertical flammability test conducted in accordance with FTMS 191A Method 5903.1 using a three second exposure and that the fabric exhibits a shrinkage percentage of no greater than approximately 7% after 20 launderings conducted in accordance with AATCC Test Method 135-1992 Table I(3)(V)(A)(iii). Although the prior art does not disclose the claimed duration of afterflame and shrinkage percentage, the claimed properties are deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention. Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Regarding claim 18, Cates does not appear to teach that at least some of the inherently flame resistant fibers of the fabric have been dyed a shade of color which would result in an L value between approximately 18 and the grieg L value of the fabric if the inherently flame resistant fibers were used to form a fabric composed exclusively of the inherently flame resistant

Art Unit: 1771

fibers. Although the prior art does not disclose shade of color, the claimed shade of color is deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention.

Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise. Additionally, in the event that it is shown that the shade of color is not inherent to the fabric of Cates, it would have been obvious to one of ordinary skill in the art to dye the fabric a shade of color substantially similar to the claimed shade of color motivated by the desire to form a dyed fabric suitable for the intended application.

Regarding claims 29-35 and 68, Cates teaches a dyed flame resistant fabric comprising a blend of a plurality of fibers, wherein the plurality of fibers consists of inherently flame resistant fibers, and cellulosic fibers, wherein at least some of the cellulosic fibers comprise a flame retardant compound, and a residual amount of a dye-assitant comprising at least one of N-cyclohexylpyrrolidone, benzyl alcohol, N,N-dibutylformamide, N,N-diethylbenzamide, hexadecyltrimethyl ammonium salt, N,N-dimethylbenzamide, N,N-diethyl-m-toluamide, N-octylpyrrolidone, aryl ether, N,N-dimethylcaprylamide, or N,N-dimethylcapramide, (see entire document including column 1 lines 9-59, column 2 lines 3-22, column 2 lines 52-61, column 3 line 10 to column 4 line 9, column 4 lines 51-65, column 5 line 60 to column 6 line 10, Table I, Table II).

Regarding claims 29-35 and 68, Cates does not appear to teach that the fabric exhibits a duration of afterflame no greater than 2.0 seconds when subjected to a vertical flammability test conducted in accordance with FTMS 191A Method 5903.1 using a three second exposure and that the fabric exhibits a shrinkage percentage of no greater than approximately 7% after 20

Art Unit: 1771

laundryings conducted in accordance with AATCC Test Method 135-1992 Table I(3)(V)(A)(iii).

Although the prior art does not disclose the claimed duration of afterflame and shrinkage percentage, the claimed properties are deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention. Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Regarding claim 29, the inherently flame resistant fibers comprise at least one of aromatic polyamide, polyamide imide, or polyimide (column 3 lines 21-62).

Regarding claim 30, at least some of the inherently flame resistant fibers comprise meta-aramid fibers (column 3 lines 21-62).

Regarding claim 31, at least some of the cellulosic fibers comprise at least one of rayon, acetate, triacetate, or lyocell (column 3 lines 21-62).

Regarding claim 32, at least some of the cellulosic fibers comprise rayon fibers (column 3 lines 21-62).

Regarding claim 33, the residual amount of dye assistant comprises at least one of N-cyclohexylpyrrolidone, benzyl alcohol, or N,N-dibutylformamide (column 1 lines 46-59, column 2 lines 3-22, column 6 lines 4-10).

Regarding claim 35, Cates does not appear to teach that at least some of the inherently flame resistant fibers of the fabric have been dyed a shade of color which would result in an L value between approximately 18 and the griegie L value of the fabric if the inherently flame resistant fibers were used to form a fabric composed exclusively of the inherently flame resistant fibers. Although the prior art does not disclose shade of color, the claimed shade of color is

Art Unit: 1771

deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention.

Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise. Additionally, in the event that it is shown that the shade of color is not inherent to the fabric of Cates, it would have been obvious to one of ordinary skill in the art to dye the fabric a shade of color substantially similar to the claimed shade of color motivated by the desire to form a dyed fabric suitable for the intended application.

Regarding claims 37-42 and 69, Cates teaches a dyed flame resistant fabric comprising a blend of a plurality of fibers, wherein the plurality of fibers consists of inherently flame resistant fibers, and cellulosic fibers, wherein at least some of the cellulosic fibers comprise a flame retardant compound, and a residual amount of a dye-assistant comprising at least one of N-cyclohexylpyrrolidone, benzyl alcohol, N,N-dibutylformamide, N,N-diethylbenzamide, hexadecyltrimethyl ammonium salt, N,N-dimethylbenzamide, N,N-diethyl-m-toluamide, N-octylpyrrolidone, aryl ether, N,N-dimethylcaprylamide, or N,N-dimethylcapramide (see entire document including column 1 lines 9-59, column 2 lines 3-22, column 2 lines 52-61, column 3 line 10 to column 4 line 9, column 4 lines 51-65, column 5 line 60 to column 6 line 10, Table I, Table II).

Regarding claims 37-42 and 69, Cates does not appear to teach that the fabric exhibits a shrinkage percentage of no greater than approximately 7% after 20 launderings conducted in accordance with AATCC Test Method 135-1992 Table I(3)(V)(A)(iii). Although the prior art does not disclose the claimed shrinkage percentage, the claimed property is deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a

Art Unit: 1771

similar structural and chemical composition as the claimed invention. Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Regarding claim 37, at least some of the inherently flame resistant fibers comprise at least one of aromatic polyamide, polyamide imide, or polyimide (column 3 lines 21-62).

Regarding claim 38, at least some of the inherently flame resistant fibers comprise meta-aramid fibers (column 3 lines 21-62).

Regarding claim 39, at least some of the cellulosic fibers comprise at least one of rayon, acetate, triacetate, or lyocell (column 3 lines 21-62).

Regarding claim 40, at least some of the cellulosic fibers comprise rayon fibers (column 3 lines 21-62).

Regarding claim 41, the residual amount of dye assistant comprises at least one of N-cyclohexylpyrrolidone, benzyl alcohol, or N,N-dibutylformamide (column 1 lines 46-59, column 2 lines 3-22, column 6 lines 4-10).

Regarding claim 42, Cates does not appear to teach that at least some of the inherently flame resistant fibers of the fabric have been dyed a shade of color which would result in an L value between approximately 18 and the grieg L value of the fabric if the inherently flame resistant fibers were used to form a fabric composed exclusively of the inherently flame resistant fibers. Although the prior art does not disclose shade of color, the claimed shade of color is deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention.

Properties are the same when the structure and composition are the same. The burden is on the

Art Unit: 1771

Applicants to prove otherwise. Additionally, in the event that it is shown that the shade of color is not inherent to the fabric of Cates, it would have been obvious to one of ordinary skill in the art to dye the fabric a shade of color substantially similar to the claimed shade of color motivated by the desire to form a dyed fabric suitable for the intended application.

Regarding claims 45-49, 51-53 and 70, Cates teaches a dyed flame resistant fabric comprising a blend of a plurality of fibers, wherein the plurality of fibers consists of inherently flame resistant fibers, wherein at least some of the inherently flame resistant fibers are dyed, and cellulosic fibers, wherein at least some of the cellulosic fibers comprise a flame retardant compound, and a residual amount of a dye-assistent comprising at least one of N-cyclohexylpyrrolidone, benzyl alcohol, N,N-dibutylformamide, N,N-diethylbenzamide, hexadecyltrimethyl ammonium salt, N,N-dimethylbenzamide, N,N-diethyl-m-toluamide, N-octylpyrrolidone, aryl ether, N,N-dimethylcaprylamide, or N,N-dimethylcapramide (see entire document including column 1 lines 9-59, column 2 lines 3-22, column 2 lines 52-61, column 3 line 10 to column 4 line 9, column 4 lines 51-65, column 5 line 60 to column 6 line 10, Table I, Table II).

Regarding claim 45, the residual amount of dye assistant comprises at least one of N-cyclohexylpyrrolidone, benzyl alcohol, or N,N-dibutylformamide (column 1 lines 46-59, column 2 lines 3-22, column 6 lines 4-10).

Regarding claim 46, at least some of the inherently flame resistant fibers comprise at least one of aromatic polyamide, polyamide imide, or polyimide (column 3 lines 21-62).

Regarding claim 47, at least some of the inherently flame resistant fibers comprise meta-aramid fibers (column 3 lines 21-62).

Regarding claim 48, at least some of the cellulosic fibers comprise at least one of rayon, acetate, triacetate, or lyocell (column 3 lines 21-62).

Regarding claim 49, at least some of the cellulosic fibers comprise rayon fibers (column 3 lines 21-62).

Regarding claims 51 and 52, Cates does not appear to teach that the fabric exhibits a duration of afterflame no greater than 2.0 seconds when subjected to a vertical flammability test conducted in accordance with FTMS 191A Method 5903.1 using a three second exposure and that the fabric exhibits a shrinkage percentage of no greater than approximately 7% after 20 launderings conducted in accordance with AATCC Test Method 135-1992 Table I(3)(V)(A)(iii). Although the prior art does not disclose the claimed duration of afterflame and shrinkage percentage, the claimed properties are deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention. Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Regarding claim 53, Cates does not appear to teach that at least some of the inherently flame resistant fibers of the fabric have been dyed a shade of color which would result in an L value between approximately 18 and the griage L value of the fabric if the inherently flame resistant fibers were used to form a fabric composed exclusively of the inherently flame resistant fibers. Although the prior art does not disclose shade of color, the claimed shade of color is deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention. Properties are the same when the structure and composition are the same. The burden is on the

Art Unit: 1771

Applicants to prove otherwise. Additionally, in the event that it is shown that the shade of color is not inherent to the fabric of Cates, it would have been obvious to one of ordinary skill in the art to dye the fabric a shade of color substantially similar to the claimed shade of color motivated by the desire to form a dyed fabric suitable for the intended application.

In the event it is shown that Cates does not disclose the claimed invention with sufficient specificity, the invention is obvious because Cates discloses the claimed constituents and discloses that they may be used in combination.

Claim Rejections - 35 USC § 103

3. Claims 5, 15, 20-27, 50 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cates, as applied to claims 2-4, 6-8, 10-14, 16-18, 29-35, 37-42, 45-49, 51-53, 65, 66, and 68-70 above, and further in view of USPN 4,868,041 to Yamagishi.

Regarding claims 5, 15, 20-26, 50, and 67, Cates does not appear to teach that at least some of the cellulosic fibers comprise a phosphorous compound flame retardant in a concentration of at least approximately 1.4% phosphorous by weight of cellulosic fiber. However, Cates suggests that fire or flame retardants may be added to the fabric and that the fire resistant properties, as measured by phosphorous and/or halogen retention following multiple launderings, are excellent (Cates, column 2 lines 52-61, column 3 line 63 to column 4 line 9, column 4 lines 51-65). Since Cates is silent with regards to specific concentration of phosphorous compound flame retardant, it would have been necessary and thus obvious to look to the prior art for conventional methods of flame retarding and concentrations of flame retardant. Yamagishi provides this conventional teaching showing that it is known in the fabric

Art Unit: 1771

art to blend aromatic polyamide and cellulosic fibers, wherein the cellulosic fibers are flameproofed cotton, rayon, or polynosic fibers, and wherein the flameproofed cellulosic fibers are formed by adding 1.0%-5.0% of phosphorous by weight to cellulosic fibers to flame proof the fibers (Yamagishi, column 2 lines 17-36, column 3 lines 14-52). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the fabric of Cates with the phosphorous coated cellulosic fibers, as taught by Yamagishi, motivated by the expectation of forming a flameproof fabric comprising aromatic polyamide fibers and cellulosic fibers with sufficient drape or strength.

Regarding claim 20, at least some of the inherently flame resistant fibers comprise at least one of aromatic polyamide, polyamide imide, or polyimide (Cates, column 3 lines 21-62).

Regarding claim 21, at least some of the inherently flame resistant fibers comprise meta-aramid fibers (Cates, column 3 lines 21-62).

Regarding claim 22, at least some of the cellulosic fibers comprise at least one of rayon, acetate, triacetate, or lyocell (Cates, column 3 lines 21-62).

Regarding claim 23, at least some of the cellulosic fibers comprise rayon fibers (Cates, column 3 lines 21-62).

Regarding claim 24, the residual amount of dye assistant comprises at least one of N-cyclohexylpyrrolidone, benzyl alcohol, or N,N-dibutylformamide (Cates, column 1 lines 46-59, column 2 lines 3-22, column 6 lines 4-10).

Regarding claims 25 and 26, Cates does not appear to teach that the fabric exhibits a duration of afterflame no greater than 2.0 seconds when subjected to a vertical flammability test conducted in accordance with FTMS 191A Method 5903.1 using a three second exposure and

Art Unit: 1771

that the fabric exhibits a shrinkage percentage of no greater than approximately 7% after 20 launderings conducted in accordance with AATCC Test Method 135-1992 Table I(3)(V)(A)(iii). Although the prior art does not disclose the claimed duration of afterflame and shrinkage percentage, the claimed properties are deemed to be inherent to the structure in the prior art since the Cates reference teaches an invention with a similar structural and chemical composition as the claimed invention. Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Regarding claim 27, Cates in view of Yamagishi does not appear to teach that at least some of the inherently flame resistant fibers of the fabric have been dyed a shade of color which would result in an L value between approximately 18 and the grieger L value of the fabric if the inherently flame resistant fibers were used to form a fabric composed exclusively of the inherently flame resistant fibers. Although the prior art does not disclose shade of color, the claimed shade of color is deemed to be inherent to the structure in the prior art since the Cates and Yamagishi references teach an invention with a similar structural and chemical composition as the claimed invention. Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise. Additionally, in the event that it is shown that the shade of color is not inherent to the fabric of Cates in view of Yamagishi, it would have been obvious to one of ordinary skill in the art to dye the fabric a shade of color substantially similar to the claimed shade of color motivated by the desire to form a dyed fabric suitable for the intended application.

Response to Arguments

4. Applicants' arguments with respect to claims 1-64 have been considered but are moot in view of the new grounds of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571) 272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Peter Y. Choi
May 31, 2007



ANDREW PIZIALI
PRIMARY EXAMINER